

**AMENDMENTS TO THE CLAIMS:**

1. (Currently Amended) A light emitting device drive circuit for driving a printing plate producing apparatus which has a light emitting device for emitting a laser beam for scanning a photosensitive material placed in an exposing section along both a primary scanning direction and a secondary scanning direction and exposing an image on a photosensitive material, controls an intensity of light when the light emitting device starts a primary scanning to keep a predetermined value, and drives the light emitting device in accordance with an input signal, the light emitting device drive circuit comprising:

a light receiving device for receiving the laser beam emitted from the light emitting device;

a control section for performing an auto power control based on an intensity of light received by the light receiving device, and for generating the input signal using a blanking area where the light emitting device does not perform the primary scanning, so that the intensity of light when the light emitting device starts the primary scanning is the predetermined value;

a current source for generating constant currents, each being supplied to the light emitting device either in a light emitting state or an extinction state in accordance with the an input signal;

the light emitting device to which a current is supplied by the current source; and

a resistor connected in parallel with the light emitting device, wherein

the light emitting device emits light and quenches light emission in accordance with a drive current which is a subtraction of a current supplied to the resistor from the current supplied by the current source, and

the resistance value R of the resistor is obtained using an equation:

$$R = (V_a - V_b) / (i_b - i)$$

where (ib-i) represents an amount of change of current supplied to the light emitting device, wherein the amount of change of current supplied to the light emitting device is required for keeping the intensity of light output by the light emitting device constant with a temperature change of the light emitting device caused by a light emitted therefrom in a single primary scanning time period with the light emitting device being provided alone, and (Va-Vb) represents an amount by which the light emitting device has its forward voltage reduced in accordance with the temperature change of the light emitting device caused by the light emitted therefrom in the single primary scanning time period with the light emitting device being provided alone when the current supplied to the light emitting device is constant.

2. (Cancelled)

3. (Currently Amended) A light emitting device drive circuit for ~~driving~~ a printing plate producing apparatus which has a light emitting device for emitting a laser beam for scanning a photosensitive material placed in an exposing section along both a primary scanning direction and a secondary scanning direction and exposing an image on a photosensitive material, controls an intensity of light when the light emitting device starts a primary scanning to keep a predetermined value, and drives the light emitting device in accordance with an input signal, the light emitting device drive circuit comprising:

a light receiving device for receiving the laser beam emitted from the light emitting device;

a control section for performing an auto power control based on an intensity of light received by the light receiving device, and for generating the input signal using a blanking area where the light emitting device does not perform the primary scanning, so that the intensity of light when the light emitting device starts the primary scanning is the predetermined value;

a current source for generating constant currents, each being supplied to the light emitting device either in a light emitting state or an extinction state in accordance with the an input signal;
the light emitting device to which a current is supplied by the current source;
a coil connected at one end to an anode of the light emitting device; and
a resistor connected between the other end of the coil and a cathode of the light emitting device,

wherein the light emitting device emits light and quenches light emission in accordance with a drive current which is a subtraction of a current supplied to the coil and the resistor from the current supplied by the current source, and

the resistance value R of the resistor is obtained using an equation:

$$R = (V_a - V_b) / (i_b - i)$$

where (ib-i) represents an amount of change of current supplied to the light emitting device, wherein the amount of change of current supplied to the light emitting device is required for keeping the intensity of light output by the light emitting device constant with a temperature change of the light emitting device caused by a light emitted therefrom in a single primary scanning time period with the light emitting device being provided alone, and (Va-Vb) represents an amount by which the light emitting device has its forward voltage reduced in accordance with the temperature change of the light emitting device caused by the light emitted therefrom in the single primary scanning time period with the light emitting device being provided alone when the current supplied to the light emitting device is constant.

4. (Currently Amended) The light emitting device drive circuit according to claim 3, wherein values of the coil and the resistor are ~~set so as to increase~~ such that the drive current

supplied to the light emitting device during a rising response delay period in a transition from an extinction state of the light emitting device to a light emitting state, ~~the drive current being increased by an amount for shortening~~ is greater than a drive current supplied after the rising response delay period has passed.

5. (Cancelled)

6. (Currently Amended) A light emitting device drive circuit for ~~driving a printing plate~~ producing apparatus which has a light emitting device for emitting a laser beam for scanning a photosensitive material placed in an exposing section along both a primary scanning direction and a secondary scanning direction and exposing an image on a photosensitive material, controls an intensity of light when the light emitting device starts a primary scanning to keep a predetermined value, and drives the light emitting device in accordance with an input signal, the light emitting device drive circuit comprising:

a light receiving device for receiving the laser beam emitted from the light emitting device;

a control section for performing an auto power control based on an intensity of light received by the light receiving device, and for generating the input signal using a blanking area where the light emitting device does not perform the primary scanning, so that the intensity of light when the light emitting device starts the primary scanning is the predetermined value;

a current source for generating constant currents, each being supplied to the light emitting device either in a light emitting state or an extinction state in accordance with ~~the an~~ input signal;

the light emitting device to which a current is supplied by the current source;

a resistor connected at one end to an anode of the light emitting device; and

a coil connected between the other end of the resistor and a cathode of the light emitting device,

wherein the light emitting device emits light and quenches light emission in accordance with a drive current which is a subtraction of a current supplied to the resistor and the coil from the current supplied by the current source, and

the resistance value R of the resistor is obtained using an equation:

$$R = (V_a - V_b) / (i_b - i)$$

where (i_b-i) represents an amount of change of current supplied to the light emitting device, wherein the amount of change of current supplied to the light emitting device is required for keeping the intensity of light output by the light emitting device constant with a temperature change of the light emitting device caused by a light emitted therefrom in a single primary scanning time period with the light emitting device being provided alone, and (V_a-V_b) represents an amount by which the light emitting device has its forward voltage reduced in accordance with the temperature change of the light emitting device caused by the light emitted therefrom in the single primary scanning time period with the light emitting device being provided alone when the current supplied to the light emitting device is constant.

7. (Currently Amended) The light emitting device drive circuit according to claim 6, wherein values of the coil and the resistor are ~~set so as to increase~~ such that the drive current supplied to the light emitting device during a rising response delay period in a transition from an extinction state of the light emitting device to a light emitting state, ~~the drive current being increased by an amount for shortening~~ is greater than a drive current supplied after the rising response delay period has passed.

8. (Cancelled)